

**A NEW SPECIES OF *PALATKA* HULST
(LEPIDOPTERA: PYRALIDAE: PHYCITINAE)**

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Abstract.—*Palatka powelli*, n. sp., is described from New Mexico. Adults were reared from larvae feeding on *Limonium limbatum* Small (Plumbaginaceae).

Key Words: Lepidoptera, *Palatka*, Plumbaginaceae, *Limonium*, New Mexico

The only previously described species of *Palatka*, *P. nymphaeella* Hulst, occurs from Connecticut to Texas. It is a maritime species, feeding as a larva on sea lavender (*Limonium carolinianum* (Walter) Britton) a plant that belongs to the family Plumbaginaceae (Corrette and Neunzig 1979). Recently, Jerry Powell, University of California at Berkeley, brought to our attention another *Palatka* collected in New Mexico. The larval host of the New Mexican species has been identified as *Limonium limbatum* Small, that grows in the western United States mainly on saline flats, frequently near salt lakes, rather than in coastal environments.

***Palatka powelli* Neunzig and Solis,
NEW SPECIES
(Figs. 1-7)**

Type locality.—Bitter Lake National Wildlife Refuge, Chaves Co., New Mexico.

Diagnosis.—*Palatka powelli* has a brown, well-delineated, distal band on the forewing, and, in the male the maxillary palpi bear, for the most part, long, slender scales, giving the palpi an aigrettelike appearance.

Description.—Length of forewing 7.5–8.0 mm. Head with frons roughly scaled, mostly white, reddish brown and black laterally; vertex roughly scaled, white; male antenna serrate with mesial edge of segments 3–8 forming a basal sinus, each segment produced distally into short, black spine, and entire sinus covered by weakly developed scale tuft; female antenna simple; labial palpus (Fig. 2) oblique to upcurved, extending slightly above vertex; mostly white, 2nd segment broadly scaled, with some black, mostly on distal half, 3rd segment small, mostly black; male maxillary palpus with 1st segment thin and as long as, or longer than, segments 2 and 3, scales white, mostly long and thin (Fig. 3), female maxillary palpus simple, white. Dorsum and collar of thorax mostly white washed with ochre or pale reddish brown, with a few black scales. Forewing mostly white; subbasal area with black spot; antemedial line distinct, white, preceded by broad, pale brown (black in some specimens) patch; distal margin of antemedial line partially delineated by black; postmedial line distinct, white, margined proximally and dis-



Fig. 1. *Palatka powelli* n. sp., male adult.

tally with thin line of black scales, distal line usually more complete than proximal line and followed by well-developed, broad brown band; discal spots distinct, black, usually somewhat fused together and with associated large pale-brown patch; medial area of wing also with scattered pale-brown and black scales; underside of wing of male without costal fold and sex-scaling. Hindwing dark, brownish gray, paler at fringe and in some specimens with a few pale streaks on veins. Male abdominal segment 8 with sclerotized, ventral plates (Fig. 7) and a pair of easily dislodged scale tufts. Male genitalia (Figs. 4, 5) with uncus broadly triangular; gnathos distally a simple hook; transtilla incomplete; juxta a broad flattened plate; valva elongate, narrow; sacculus produced into fingerlike element about one-sixth length of valva, extending toward costa; vinculum about as long as greatest width; aedeagus with several stout cornuti. Female genitalia (Fig. 6) with ductus bursae shorter than corpus bursae, slightly sclerotized including triangular sclerite in basal half; corpus bursae without signum, with numerous microspines and with thickened distal appendage; ductus seminalis from corpus bursae near junction with ductus bursae.

Distribution.—Known only from southeastern New Mexico.

Holotype.—♂—Bitter Lake Wildlife Refuge, Chaves Co., New Mexico, V1-19-93, V. F. Hsu, J. Powell No. 93F43, emgd. V11-15-93, reared from *Limonium limbatum*. In the Essig Collection of the University of California, Berkeley.

Paratypes.—5 ♂♂, 3 ♀♀—same collection data as for holotype, except emergence dates V11-1, V11-7, V11-8, V11-13, V11-17, V11-22, and some with genitalia slides DA 108,109, HHN 3765 and JAP 6801. In the Essig Collection and National Museum of Natural History, Washington, D.C.

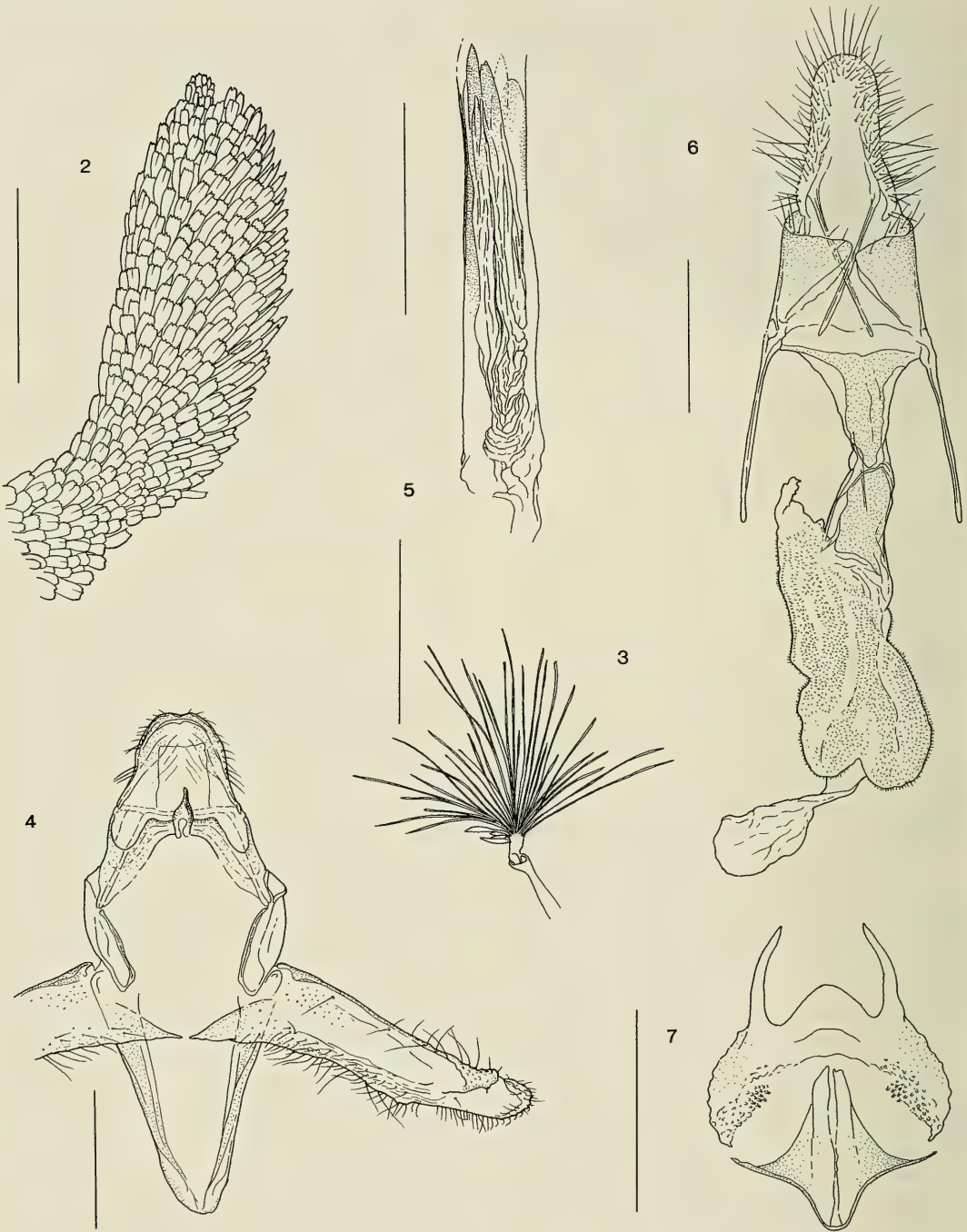
Discussion.—The genitalia of *P. powelli* and *P. nymphaeella* differ as follows: *P. powelli* has a short, fingerlike extension of the sacculus (about one-sixth length of valva), the ductus bursae is lightly sclerotized, and the thickened distal appendage of the corpus bursae is elongate, whereas *P. nymphaeella* has a longer fingerlike extension of the sacculus (about one-fourth length of valva), the ductus bursae is strongly sclerotized, and the thickened distal appendage of the corpus bursae is short.

The male eighth abdominal plates associated with the setal tufts also are diagnostic for the two species. The anterior plate of *P. powelli* is strongly convex anteriorly, and the posterior plate is somewhat reduced with slender hornlike lateral arms projecting posteriorly. *P. nymphaeella* has the anterior plate weakly convex anteriorly and the posterior plate more nearly complete. Heinrich (1956) for *P. nymphaeella* stated “Eighth abdominal segment of male simple.” However, his figure 462b shows a sclerotized plate and setal tuft insertions on this segment.

Etymology.—*Palatka powelli* is named in honor of Jerry A. Powell.

KEY TO *PALATKA* ADULTS

1. Forewing with well-delineated, transverse, broad, dark distal band (Fig. 1); maxillary palpus of male with many very slender scales (Fig. 3); southwestern United States *powelli*, n. sp.
- Forewing without well-delineated, distal band; maxillary palpus of male with short scales; eastern United States *nymphaeella* Hulst



Figs. 2-7. *Palatka powelli*. 2, Labial palpus. 3, Distal part of maxillary palpus. 4, Male genitalia (aedeagus and juxta omitted). 5, Aedeagus. 6, Female genitalia. 7, Ventral sclerites of 8th abdominal segment of male. All scale lengths 0.5 mm.

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